

Nanophotonic silicon-based biosensors and biochips

Ivo RENDINA, Institute of Applied Sciences and Intelligent Systems, National Research Council, Italy

In this communication, some new results carried out in Naples at the Institute Applied Sciences and Intelligent Systems of the National Research Council of Italy, with perspective applications in the field of biomedicine, will be presented and discussed. They exploit the advance in nanotechnologies and nanophotonics for the realization of new devices characterized by unexpected behaviours and performance, such as nano-biosensors and microfluidic biochips for cell manipulation.